females have the band undefined, cloudy. I see that occasionally in a dark *Semidea*, white spots are present in similar position on the under hind wing to that of this last-mentioned female *Subhyalina*.

FIELD NOTES FROM TEXAS AND LOUISIANA.

BY H. F. WICKHAM, IOWA CITY, IOWA.

In the summer of 1892 I spent a month on the line of the Southern Pacific R. R., between Morgan City, Louisiana, and San Antonio, Texas. While the collecting was by no means of the best, a few notes may interest the readers of the Canadian Entomologist and give some idea of insect life in the Southern States during the hot months.

Morgan City lies to the west of New Orleans on the Atchafalaya River, in a country so flat that, as the natives say, " Water will only run as far as you dig a ditch for it." The neighbourhood is covered in great part by heavy woods, with a rank underbrush of poison oak, trumpet creeper and palmetto, the ground beneath all being, at the time of my visit, soaked with rains and dotted with innumerable pools of water in which mosquitoes were freely breeding. Along the edge of the woods I had to do the most of the collecting, as I found it quite an impossibility to brave the attacks of the mosquitoes and Tabanidæ in the depth of the forest.

The palmetto proved to be the plant best worth hunting over, and when I arrived on the twenty-second of June it was in bloom, or just going out in some cases. Where the flowers were fresh and sweet there were numbers of *Euphoria sepulchralis* and *Trichius delta*, the latter the less numerous and very hard to capture in the bright sunshine, though when cloudy weather prevailed they were much more sluggish. *Chauliognathus marginatus* occurred on the flowers in numbers, but it was not considered worth while to take many of them, as it appears to be common from Pennsylvania south, though I never take it in Iowa. *Paria canella* occurred once in a while, and a single specimen of *Phyton pallidum* was also shaken into my umbrella. When the flowers had fallen off, disclosing the newly-formed fruit, I found a very nice Curculionid beetle, *Pachybaris porosus*, which was known previously from Florida. It seemed not to occur on the plants except where the flowers had commenced to drop off, and quite likely oviposits on the newly-formed fruit. Wherever an open patch allowed a chance for growth of wild sunflowers, there were a good many beetles of other kinds—*Mecas inornata*, *Systena*, sp., and a *Baris*, which seems to be new. A Solanum yielded a few specimens of an *Anthonomus* and a very small specimen of *Trichobaris trinotata*, a species which has proved in places a very serious pest to the potato. By scratching away dead leaves in a thicket a few *Lachnosterna ephelida* were secured, and a few also of *Anisodactylus maculicornis*. A rotten log, on being broken, disclosed an example of *Chlænius fuscicornis;* another contained several specimens of *Passalus cornutus*, with its larva. An ant's nest held, besides the legitimate inhabitants, a number of the curious little *Limulodes paradoxus*, which I have found with ants from Iowa to Arizona. Dry fungus was full of *Ennearthron*, and in it I found also a specimen of *Euplectus linearis*.

At night, around the light, I added still a few species to my collecting bottles—*Hippodamia parenthesis*, *Atænius figurator*, *Cyclocephala immaculata* and *Lachnosterna ephelida*, but insects were not by any means as common as I had expected them to be, so on the twenty-sixth I left for Houston, Texas.

The next afternoon, arrived at Houston, I found inside of the city limits great numbers of a beautiful weevil, *Eudiagogus pulcher*, which has a curious habit in lieu of dropping off the food-plant, as is usual with most Rhynchophora when disturbed. It feeds on the leaves of the coffee-weed, and usually remains on the upper surface of the leaf while eating in plain sight. If disturbed, it whirls quickly around to the under surface of the leaf, and either remains clinging there or runs rapidly down the stem of the plant towards the ground, keeping to the under side, so as to be invisible from above. With it I found associated *Anomœa laticlavia* and *Neoclytus erythrocephalus*.

Along the sides of the track, where the vegetation was rank, I got a few beautiful specimens of *Œdionychis* and a few of *Paria viridicyanea*. Under a stone occurred several *Psammodius nanus* in burrows which they had made just at the surface of the ground, much as some Scolytidæ bore in bark. A stump covered with fungi was next investigated and proved quite a rich find, yielding *Platydema* of two or three species, *Hoplocephala bicornis*, *Tritoma erythrocephala*, *T. angulata* and *T. atriventris*, besides several examples of the pretty little *Formicomus scitulus*, which seemed not to live on the fungi, but on the ground near them.

The woods themselves yielded beetles of a different sort. Beating branches of lately cut pine trees was productive of a number of *Drasterius amabalis*, a few *Silvanus rectus*, and a few other things. A little *Mono-*

hammus of the form called *minor* was taken, also a *Buprestis* and a *Chalcophora.* Where a live oak was being cut up I found *Chrysobothris femorata* var. *Alabamæ* and *Neoclytus scutellaris* running over the branches, but they were wild and difficult of capture. A large fungus was found to be often infested by *Pocadius helvolus* and a smaller one by *Pallodes silaceus.* Of these latter, when the fungus was small only one or two specimens were found in it, but larger fungi yielded more beetles. Five or six specimens of *Octotoma plicatula* were taken on leaves, and looked very little like living things when at rest.

Washing the banks of a stream brought very little to light, except a few specimens of *Tachys* and a very small *Heterocerus*; water-beetles were almost entirely absent. One incident of interest was noticed here, however, when a little *Tettix* (I use the generic name in the old, wide sense) was disturbed and jumped into the water, alighting on a stick that was completely submerged to the depth of about an inch, and rested there until I captured it. This brings to mind a note of Mr. Roberts in "Entomologica Americana," where he states that he found *Stenus* on masses of frogs' eggs which were completely submerged.

Collecting on weeds along the edges of woods and in open patches disclosed a number of *Conotrachelus leucophœatus* in the heads of a plant with milky sap, and with them occurred large numbers of *Aphthona texana*, a little jumping beetle of rather slow movements. I took all of them with my fingers without great trouble. *Henous confertus* runs around in grassy places during the morning and evening, having apparently the same habits in this respect as many of its wingless relations.

A day was spent in making a side-trip to Galveston to get in sea-shore collecting. The beach was alive with *Cicindela saulcyi*, but the only other Coleoptera there were *Phaleria* sp, and an Oedemerid, probably an *Asclera*. Farther back, out of reach of the tides and salt spray, I got a great number of *Haltica punctipennis* which was swarming on some low weeds.

Columbus was reached on the morning of July fifth, and work commenced at once. Though only a few hours ride from Houston, it is in quite a different looking piece of country. The valley of the Colorado here is wooded with deciduous trees, the pine having disappeared, and the better drainage is apparent from the nature of the soil. This spot was made historic in the annals of Entomology by the labours of Mr.

Schwarz, and the papers of Drs. Leconte and Horn of a few years back are full of allusions to species collected there by him. I hoped to find it an interesting field, and was not disappointed.

Most of the work was done along the river bottom, where the cottonwood timber was usually sufficiently free from underbrush to admit of freedom of movement and of sight. The felled trees, when the bark was peeled off, furnished *Toxidium compressum*, *Litargus balteatus*, *Epierus regularis* and *Bacanius punctiformis*. Beneath the old trunks were found *Blapstinus fortis* and *arenarius*. The cow-droppings were productive of *Copris carolina*, *Phanæus triangularis*, *Onthophagus pennsylvanicus*, *Aphodius tenuistriatus* and *stercorosus* and *Cercyon variegatum*. The banks of the river were covered with *Cicindela rectilatera* and *C. sperata; Tetragonoderus fasciatus* and *T. latipennis*, the latter abundant, were to be obtained in more circumscribed spots with a species of *Stenus* near *stygicus*. The weeds on the bars, on being pulled up, were found to shelter around their roots a colony of *Agonoderus comma*, *Anthicus difficilis*, *A. nanus*, *Metachroma interrupta* and *Myochrous denticollis*. This *Myochrous* was also often found feeding on willows.

On leaving the immediate vicinity of the river and working along the roads, *Languria læta* is found commonly with *Acylomus calcaratus* and *Conotrachelus leucophæatus*. Arriving at a point where a little creek crossed the road, I ascended it, and where a tree had been felled across it some years ago and was consequently in a rather advanced stage of decay, settled down for an hour or two of solid work. By peeling off the bark carefully I was able to get everything worth taking, as whatever was nimble enough to escape my bottle at first, fell into the water and was easily secured. The results were two *Mallodon dasystomus*, several *Eupsalis minuta*, *Platydema ruficorne*, *flavipes*, *lævipes*, *Eustrophus bicolor*, and several other things. Leaving this spot and going on to a freshly cut mesquit, I got under the loose bark four or five specimens of *Conotrachelus anaglypticus*, a few *Carpophilus semitectus*. and some *Laemophlœus chæmeropis*. Under damp logs I found the specimens of larvæ, pupæ and imagines of *Epipocus* described in another paper.

After a week's stay at Columbus I moved on to Harwood, which is at a considerably higher altitude—here the cottonwoods were gone and replaced by mesquit and oak, much of it "scrub." The collecting was not nearly so good and of a different character, *Eleodes tricostata* being one of the most prominent beetles. Two or three *Pasimachus* were found under logs, also a pair of *Romaleum atomarium* and a large *Mallodon serrulatus*. *Acmæodera pulchella* var. *mixta* and *Bruchus amicus* occurred on flowers. The leguminose trees and shrubs yielded, by beating, *Cryptocephalus defectus*, *Epicauta nigritarsis* and *Coleocerus marmoratus*, while under the bark and in the wood of dead trunks and branches I took a number of *Phlœonemus catenulatus* and *Trogoxylon*, sp , besides a fine *Amphicerus*. The dead wood was full of cerambycid larvæ.

The next stop was made at Luling, in the San Marcos Valley, a spot which pleased me more than any other in Texas. The river bottom is heavily wooded in places, and the holes and cracks in the great trees were the hiding places of beetles of large size and great beauty. The fine *Zopherus haldemanni* was taken here in some numbers, sometimes resting on the surface of logs which were lying on the ground, or, just as often, climbing on the trunks of trees seven or eight feet up. Besides these I got a large *Mallodon*, two *Alaus lusciosus* and a number of *Strategus julianus*, the last nearly all dead but in perfect order—sometimes not yet stiffened. They occurred in holes where trees had been torn up by the roots, or often simply lying on the ground without cover or protection of any sort. *Photuris pennsylvanica* was found very commonly in one spot, clinging to the trunks of trees close to the ground, while three or four *Chlœnius orbus* were taken beneath logs in damp places. A pair of *Canthon cyanellus* were detected in the act of inspecting a dead clam on the river bank and were promptly " run in."

The weeds along the roads were full of a species of *Chrysomela*, for which I can get no name. The great compositæ by the edges of the cotton-fields furnished numerous *Lixus laesicollis*, *Smicronyx obtectus*, *Pachytychius amoenus*, and some other weevils.

San Antonio did not prove to be in as good a locality for beetles, and only in a few favoured spots could anything be found. Beating along the track of one of the lines of railroad proved more productive than anything else, and in this way I obtained a number of *Cryptocephalus defectus*, *Coccinella abdominalis*, *Epicauta nigritarsis*, and a little Galerucid not yet described. The banks of the river, close to the source, yielded *Ega sallei*, *Oodes* sp., *Ochthebius foveicollis*, and *Limnichus lutrochinus*, with several other things; but the great haul of the season was a lot of several dozen assorted ticks, which I collected on my own person after sitting on a stone in the woods for a few moments to eat my lunch.